

PROCEEDINGS OF THE
ROYAL ENTOMOLOGICAL SOCIETY
OF LONDON

SERIES C. JOURNAL OF MEETINGS

VOLUME 24.

No. 1, 1959

ORDINARY MEETING

WEDNESDAY, 4th MARCH, 1959, at 5.30 p.m.

AGENDA

1. Confirmation of the Proceedings of the Ordinary Meeting held on 21st January, 1959.
2. Announcement of Vice-Presidents for 1959.
3. Recommendations of candidates for Fellowship. First reading.
4. Recommendations of candidates for Fellowship. Second reading.
5. Announcement of election of new Fellows.
6. Additions to the Library [see p. 2].
7. Admission of Fellows.
8. Exhibits.
9. Communications.

1. Professor V. B. Wigglesworth, C.B.E., F.R.S.

Some histological studies on insects.

[ABSTRACT]

Osmium tetroxide (osmic acid) gives the most natural fixation of living cells. It reacts with fatty substances and it is suggested that it acts as a fixative by causing these to polymerize and become insoluble. It is possible to reveal the site of the osmium bound in this way by means of gallic acid derivatives. This provides the basis of a new histological method which stains primarily fatty substances, rather than proteins and nucleic acids as do most standard methods. Examples will be shown of the results of applying this method to insects.

In order to utilize this method fully it is necessary to cut sections from 0.5 to 2 microns thick. A simple method for doing this will be described and some results obtained on the nervous system of the insect demonstrated.

The same method is useful also for cutting sections of chitin.

2. Mr. P. F. Mattingly

The natural history of mosquito-borne diseases.

[ABSTRACT]

The mosquito-borne diseases may conveniently be grouped under the three headings of malaria, filariasis and the virus diseases. All these have been the subject of more and more extensive researches with the result that the field as a whole has become more and more difficult to survey. As against this it is clearly desirable to attempt to discern the general picture of the natural history of man and his parasites which is emerging. A major revolution has taken place in the field of malariology in consequence of the introduction of potent residual insecticides. This has led to a shifting of the main weight of attack from the early stages of the mosquito to the adults. In consequence the biology of the adults is now receiving the same sort of intensive investigation as was previously accorded to the biology of the early stages. In connection with filariasis attention is being increasingly directed to wild mosquito vectors and in South-east Asia there is evidence of the occurrence of reservoirs of human "Filaria" in wild mammals. In the virus diseases this situation is already all too familiar and both birds and lower primates are known to be involved in the complex natural history of these diseases.

TEA will be served in the Library before the meeting.

NOTICES

The next meeting will be held on Wednesday, 1st April, 1959 :

Dr. E. J. Popham.—The respiration of Corixidae.

PAUL FREEMAN, *Honorary Secretary.*

ADDITIONS TO THE LIBRARY

Presented

- Akbar, S. S. The morphology and life-history of *Leptocoris varicornis* Fabr. (Coreidae, Hemiptera) Pt. I-II. *Alig. Musl. Univ. Publ. (Zool.) Ind. Ins. Typ.* 5 : 1-53 ; 1-49, 1957-58. [The Author.]
- British Museum (Natural History). *Economic Series.* 12. *The cockroach.* 5th ed. (1951) repr. 8vo. London, 1958. [Pamphl.] [Trustees of the British Museum.]
- Cave Research Group of Great Britain. Biol. Suppl. *Fauna collected from caves as recorded in the C.R.G. "Fauna Records".* Pt. I-IV (1938-49). 8vo. Berkhamsted, 1955-59. [Brig. E. A. Glennie.]
- Sen, A. C. *A review of entomological research work in Bihar during the First Five Year Plan (1951-56).* fscp. Patna. [1958]. [The Author.]

Purchased

- Brandt, H. *Welcher Schädling ist das?* 8vo. Stuttgart: Franckh'sche Verlag, 1957. [*Kosmos-Naturführer.*]
- Hammer, M. *Investigations on the microfauna of northern Canada*. Pt. I. *Oribatidae*. Pt. II. *Collembola*. 4to. Copenhagen: Munksgaard, 1952-53. [*Acta Arctica* 4, 6.]
- Insects of Micronesia*. 8vo. Honolulu: Bishop Museum, 1958.
- Vol. 7 (4) *Heteroptera: Lygaeidae*, by H. G. Barber.
- Vol. 13 (2) *Diptera: Omphralidae (Scenopinidae)*, by D. E. Hardy; *Sarcophagidae*, by H. de Souza Lopes.
- Vol. 16 (2) *Coleoptera: Lampyridae*, by W. Wittmer; *Anobiidae*, by E. J. Ford; *Bostrychidae*, by M. Chûjo; *Endomychidae*, by H. Strohecker.
- Vol. 19 (2) *Hymenoptera: Eucharidae*, by C. Watanabe; *Ichneumonidae*, *Stephanidae* and *Evanidae*, by H. Townes.
- Jagemann, E. [*Elateridae: Coleoptera.*] 8vo. Praha: Československa Akademie, 1955. [*Fauna CSR* 4.]
- Janse, A. J. T. *The moths of South Africa*. Vol. VI, pt. I. *Gelechiidae*. 8vo. Pretoria: Transvaal Museum, 1958.
- Macdonald, G. *The epidemiology and control of malaria*. 8vo. Oxford: Univ. Pr., 1957.
- Pflugfelder, O. *Entwicklungsphysiologie der Insekten*. (1952). 2te. Aufl. 8vo. Leipzig: Geest & Portig, 1958.
- Results of the Norwegian scientific expedition to Tristan da Cunha, 1937-38*. 8vo. Oslo: Norske Videnskaps-Akademi.
23. *Lepidoptera*, by P. E. L. Viette. 1952.
28. *Orthoptera (Suborder Caelifera) Tridactylidae*, by C. Willemse. 1954.
30. *Siphonaptera*, by H. E. K. Jordan. 1954.
31. *Scale insects (Coccoidea)*, by A. Reyne. 1954.
32. *Diplopoda*, by C. A. W. Jeekel. 1954.
34. *Aphididae*, by D. Hille Ris Lambers. 1955.
35. *Pseudoscorpione*, by M. Beier. 1955.
- Sheppard, P. M. *Natural selection and heredity*. 8vo. London: Hutchinson, 1958.
- Sjöstedt, Y. *Acridoidea Australica: K. svenska VetenskAkad. Handl.* 62(3): 1-318, 1921.
- Warnecke, G. *Welcher Schmetterling ist das?* 8vo. Stuttgart: Franckh'sche Verlag, 1958. [*Kosmos-Naturführer.*]
- In addition, separates have been presented by Dr. A. G. Hamilton; Dr. D. J. Lewis; Mr. W. V. Harris; Dr. F. L. Vanderplank; Dr. T. Clay; Dr. P. T. Haskell; Dr. J. L. Cloudsley-Thompson; Dr. B. R. Laurence; Mr. A. Richardson; Mr. R. G. Pearson; Director, Central Veterinary Laboratory, Weybridge, Surrey; Professor T. W. Kirkpatrick; Companhia des Diamantes de Angola; Colonel N. MacNeill; Professor G. C. Varley and the Anti-Locust Research Centre.

NOTICES

In addition to the *Transactions and Proceedings* (Series A, B, and C), the following publications are available on application at the Society's rooms:—

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| " 8. Anoplura. | " 16. Siphonaptera. |
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 Vol. I, Part 6. Plecoptera. By D. E. Kimmins. Price 3s. 6d. plus postage.
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 Vol. V, Part 5b. Coleoptera : Phalacridae. By R. T. Thompson. Price 3s. 6d. plus postage.
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 Vol. V, Part 9. Coleoptera : Lagriidae to Meloidae. By F. D. Buck. Price 6s. plus postage.
 Vol. V, Part 11. Coleoptera : Scarabaeoidea. By E. B. Britton. 7s. 6d. plus postage.
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 Vol. X, Part 1. Diptera : Syrphidae. By R. L. Coe. Price 17s. 6d. plus postage.
 Vol. X, Part 4a. Diptera : Cyclorrhapha (part). By F. I. van Emden. Price 20s. 0d. plus postage.

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